

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) Apparatus for induction heating of pieces or blanks (10) of electrically conducting and non-magnetic material, comprising:

a device for creating a static magnetic field (3) comprising at least one coil comprising windings of superconducting material;

means for applying a direct current to said at least one coil; and

a device (2) for causing a relative rotational movement (4) between the piece or blank (10) and the static magnetic field (3), so that current (12) is induced in the piece or blank (10) which thereby is being heated up, ~~wherein the device for creation of the static magnetic field (3) comprises at least one coil (52,53) comprising windings of superconducting material.~~

2. (Currently Amended) Apparatus according to claim 1, wherein the at least one coil (52,53) is adapted to entirely or partially surround the piece or blank (10).

3. (Cancelled)

4. (Withdrawn, Currently Amended) Apparatus according to claim 1, wherein the device for creating of the static magnetic field (3,31) further comprises at least one permanent magnet (51).

5. (Withdrawn, Currently Amended) Apparatus according to claim 4, wherein the at least one permanent magnet (51) is included in an annular permanent magnet device arranged to surround the piece or blank (10).

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) Apparatus according to claim 1, wherein the device ~~(2)~~ for relative movement is arranged to move the piece or blank ~~(10)~~ in relation to the static magnetic field ~~(3,31,32)~~.

9. (Currently Amended) Apparatus according to claim 1, wherein the device for relative movement is arranged to move the device for creation of the static magnetic field ~~(3,31,32)~~ in relation to the piece or blank ~~(10)~~.

10. (Currently Amended) Apparatus according to claim 1, further comprising a device for creation of an alternating magnetic field, so that the static magnetic field ~~(3,31,32)~~ is combined with the alternating magnetic field thereby having a common effect on the piece or blank ~~(10)~~.

11. (Cancelled)